AMENDMENTS TO THE SPECIFICATION

In the specification:

Please enter the enclosed sequence listing on page 43 of the specification and renumber the pages with the Claims and Abstract accordingly. In addition to the diskette, a paper copy of the Sequence Listing is provided herewith.

Please amend the specification as shown:

Please delete the paragraph on page 2, lines 1-7, and replace it with the following paragraph:

--Many molecular derivatives of GLP-1 have been reported. For instance, GLP-1 (7-37) is known. A variety of analogs have also been described eg., Gln^9–GLP-1 (7-37) **(SEQ ID NO: 15)**, D-Gln^9 -GLP-1 (7-37), acetyl-Lys^9 -GLP-1 (7-37) **(SEQ ID NO: 16)**, Thr^{16} -Lys^{18} -GLP-1(7-37) **(SEQ ID NO: 17)**, and Lys^{18} -GLP-1 (7-37) **(SEQ ID NO: 18)**, Gly^8 -GLP-1 (7-37) **(SEQ ID NO: 19)**, Ser^8 -GLP-1 (7-37) **(SEQ ID NO: 20)**. Other GLP-1 derivatives (sometimes called "variants") have also been reported particularly as acid addition salts, carboxylate salts, lower alkyl esters, and amides. See WO 91/11457 and Mojsov, S., *Int. J. Peptide Protein Research,* 40:333-343 (1992), and references cites therein.--

Please delete the paragraph on page 10, lines 13-16, and replace it with the following paragraph:

--The amino acid sequence of GLP-1 (7-37) is well-known and has the following sequence: NH_2-His^7 -Ala-Glu-Gly^{10} -Thr-Phe-Thr-Ser-Asp^{15} -Val-Ser-Ser-Tyr-Leu^{20} -Glu-Gly-Gln-Ala-Ala^{25}~~^{20}~~ -Lys-Glu-Phe-Ile-Ala^{30} -Trp-Leu-Val-Lys-Gly-Arg-Gly^{37} -COOH (SEQ ID NO: 1)--

Please delete the paragraph on page 10, lines 18-25, and replace it with the following paragraph:

--A "GLP-1 analog" is defined as a molecule having a modification including one or more amino acid substitutions, deletions, inversions, or additions when compared with GLP-1. GLP-1 analogs include, for example, GLP-1 (7-34) **(SEQ ID NO: 21)** and GLP-1 (7-35) **(SEQ ID NO: 22)**, GLP-1 (7-36) **(SEQ ID NO: 23)**, Val^{8} -GLP-1 (7-37) **(SEQ ID NO: 24)**, Gln^{9} -GLP-1 (7-37) **(SEQ ID NO: 15)**, D-Gln^{9} -GLP-1 (7-37), Thr^{16} -Lys^{18} -GLP -1(7-37) **(SEQ ID NO: 17)**, and Lys^{18} -GLP-1 (7-37) **(SEQ ID NO: 18)**. Preferred GLP-1 analogs are GLP-1 (7-34) **(SEQ ID NO: 21)** and GLP (7-35) **(SEQ ID NO: 22)**, which are disclosed in U.S. Pat. No. 5,118,666, and also GLP-1 (7-36) **(SEQ ID NO: 23)**. These compounds are the biologically processed forms of GLP-1 having insulinotropic properties. Other GLP-1 analogs are disclosed in U.S. Pat. No. 5,545,618.--

Please delete the paragraph on page 17, line 16, to page 18, line 12, and replace it with the following paragraph:

--More particular examples of GLP-1 and GLP-1 related molecules including analogs thereof such as those disclosed in the PCT/DK00/00393 application. Such molecules include the following specific compounds:

des Ser^{39} -exendin-4(1-39)-Lys_6-NH_2 ~~(SEQ ID NO:__),~~

des Pro^{36} -exendin-4(1-39)-Lys_6-NH_2 ~~(SEQ ID NO:__),~~

des Ala^{35} -exendin-4(1-39)-Lys_6-NH_2 ~~(SEQ ID NO:__),~~

des Gly^{34} -exendin-4(1-39)-Lys_6-NH_2 ~~(SEQ ID NO:__),~~

des Ser^{39} -(Lys^{40} (palmitoyl))exendin-4(1-39)-Lys_7-NH_2 ~~(SEQ ID NO:__),~~

des Gly^{34} -(Lys^{40} (palmitoyl))exendin-4(1-39)-Lys_7-NH_2 ~~(SEQ ID NO:__),~~

des Ala^{35} -(Lys^{40} (palmitoyl))exendin-4(1-39)-Lys_7-NH_2 ~~(SEQ ID NO:__),~~

des Pro^{36} -(Lys^{40} (palmitoyl))exendin-4(1-39)-Lys_7-NH_2 ~~(SEQ ID NO:__),~~

Lys^{40} (palmitoyl)exendin-4(1-39)-Lys_7-NH_2 ~~(SEQ ID NO:),~~

des Pro^{36}, Pro^{37} -exendin-4(1-39)-Lys_6-NH_2,

Lys_6-des Pro^{36}, Pro^{37}, Pro^{38} -exendin-4(1-39)-NH_2,

$Asn(Glu)_5$-des Pro^{36}, Pro^{37}, Pro^{38} -exendin-4(1-39)-NH_2,

Lys_6-des Pro^{36}, Pro^{37}, Pro^{38} -exendin-4(1-39)-Lys_6-NH_2

$Asn(Glu)_5$-des Pro^{36}, Pro^{37}, Pro^{38} -exendin-4(1-39)-Lys_6-NH_2,

des Pro^{36}, Pro^{37}, Pro^{38} -exendin-4(1-39)-Lys_6-NH_2,

Gly^8-GLP-1 (7-36)-Lys_6-NH_2 (SEQ ID NO: **6**)

Lys_6-Gly^8-GLP-1 (7-36)-Lys_6-NH_2 **(SEQ ID NO: 7)**,

Lys_6-Gly^8-GLP-1 (7-36)-NH_2 **(SEQ ID NO: 8)**,

(Gly^8,Lys^{37}(palmitoyl)-GLP-1(7-36)(Human)-Lys_7-NH_2 (SEQ ID NO: **9**),

(Gly^8,Lys^{26}(palmitoyl)-GLP-1(7-36)(Human)-Lys_6-NH_2 **(SEQ ID NO: 10),**

(Gly^8,Lys^{34}(palmitoyl)-GLP-1(7-36)(Human)-Lys_6-NH_2 **(SEQ ID NO: 11),**

Gly^8-GLP-1 (7-36)-Lys_8-NH_2 **(SEQ ID NO: 12)**,

Gly^8-GLP-1 (7-36)-Lys_{10}-NH_2 **(SEQ ID NO: 13)**,

Gly^8-GLP-1 (7-37)-Lys_6-NH_2 **(SEQ ID NO: 14)**; and the free acid or pharmaceutically acceptable salt thereof.--

Please delete the paragraph on page 37, lines 12-19, and replace it with the following paragraph:

--*Insulin standard for quantitative PCR.* One µl first strand synthesis was used for PCR with the following insulin primers: 5'-AACCCACCCAGGCTTTTGTCA **(SEQ ID NO: 2)**; 5'-CTTCCTCCCACGTCCAGTTGTTC-3 **(SEQ ID NO: 3).** The amplicon were inserted into the PCR 4-TOPO vector (invitrogen) and transformed into E.coli. The plasmids were purified and 2 µg of each were linearized with either Spe I or Not I. The linearized plasmids were *in-vitro* transcribed using T7 or T3 RNA polymerase. After *in-vitro* transcription, the template was removed by DNAse treatment. Subsequently, the mixture was phenol/chloroform-extracted and

precipitated. After precipitation the RNA was dissolved to 1 mg/ml in water.--

Please delete the paragraph on page 37, line 21, to page 38, line 3, and replace it with the following paragraph:

--*Quantitative PCR.* One μg of both standard and sample were subjected to first strand synthesis as described above. A dilution series of the insulin mRNA standard, together with the samples were subjected to quantitative PCR using the following probe (Mouse insulin Taqman probe, 110-138) and the above described primers: 5'-FAM-AGGCTCTCTACCTGGTGTGTGGGGAGCGT-Tamra-3' **(SEQ ID NO: 4).** All PCR reactions were duplicates. The C_t (threshold cycle) were measured and the initial concentration of insulin mRNA was calculated according to the standard curve. *Drugs:* COMPOUND 1 (H-HGEGTFTSDLSKQMEEEAVRLFIEWLKNGGPSSGAP PSKKKKKK-NH2, **(SEQ ID NO: 5)** Batch: ZP15.65-3A) was produced at Zealand Pharma A/S using the Merifield technique.--